



Appendix A

The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health
Bureau of Environmental Health Assessment
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HOWARD K. KOH, MD, MPH
COMMISSIONER

June 2, 2000

Carol Fazio, Principal
Forest Park Middle School
46 Oakland Street
Springfield, MA 01108

Dear Ms. Fazio:

As you know, the Bureau of Environmental Health Assessment (BEHA) conducted an evaluation of the indoor air quality at the Forest Park Middle School on May 11, 2000. Michael Feeney, Chief of Emergency Response/Indoor Air Quality (ER/IAQ), BEHA, conducted this inspection. Concerns about painting and the potential impact on occupied classrooms in this building prompted this request. The central stairwell of the school was being painted while occupied by students, teachers and school staff.

Paint odors were noted in the second floor hallway around the central stairwell. This odor was traced to open cans of paint on rolling scaffolding (see Picture 1) in the hallway outside the stairwell. No containment on hallway stairwell doors was noted. No visible means of providing ventilation to remove paint vapors from the building could be identified.

A number of pathways exist for pollutants to move from areas under renovation into occupied spaces. These pathways indicate that the temporary walls are not sufficient to contain pollutants related to renovation work. The following recommendations should be implemented in order to reduce the migration of renovation generated pollutants into occupied areas and to better understand the potential for mold to impact indoor air quality:

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1. Establish communications between all parties involved with building renovations to prevent potential IAQ problems. Develop a forum for occupants to express concerns about renovations as well as a program to resolve IAQ issues.
2. Develop a notification system for building occupants immediately adjacent to construction activities to report construction/renovation related odors and/or dusts problems to the building administrator. Have these concerns relayed to the contractor in a manner to allow for a timely remediation of the problem.
3. When possible, schedule projects which produce large amounts of dusts, odors and emissions during unoccupied periods or periods of low occupancy.
4. Disseminate scheduling itinerary to all affected parties, this can be done in the form of meetings, newsletters or weekly bulletins.
5. Obtain Material Safety Data Sheets (MSDS) for all construction materials used during renovations and keep them in an area that is accessible to all individuals during periods of building operations as required by the Massachusetts Right-To-Know Act (MGL, 1983).
6. Consult MSDS' for any material applied to the effected area during renovation(s) including any sealant, carpet adhesive, tile mastic, flooring and/or roofing materials. Provide proper ventilation and allow sufficient curing time as per the manufacturer's instructions concerning these materials.
7. Use local exhaust ventilation and isolation techniques to control for renovation pollutants. Precautions should be taken to avoid the re-entrainment of these materials into the building's HVAC system. The design of each system must be assessed to determine how it may be impacted by renovation activities. Specific HVAC protection requirements pertain to the return, central filtration and supply components of the ventilation system. This may entail shutting down systems (when possible) during periods of heavy construction and demolition, ensuring systems are isolated from contaminated environments, sealing ventilation openings with plastic and utilizing filters with a higher dust spot efficiency where needed (SMACNA, 1995).
8. Seal hallway doors with polyethylene plastic and duct tape. Consider creating an air lock of a second door inside the renovation space to reduce migration.
9. If possible, relocate susceptible persons and those with pre-existing medical conditions (e.g., hypersensitivity, asthma) away from areas of renovations.

We suggest that these steps be taken on any renovation project within a public building. A full report concerning the indoor air quality assessment is in preparation and will be forwarded to you upon completion. Please feel free to contact us at (617) 624-5757 if you are in need of further information or technical assistance.

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Respectfully,

Suzanne K. Condon, Director
Bureau of Environmental Health Assessment

cc/ Mike Feeney, Chief, Emergency Response/Indoor Air Quality

References

MGL. 1983. Hazardous Substances Disclosure by Employers. Massachusetts General Laws. M.G.L. c. 111F.

SMACNA. 1995. IAQ Guidelines for Occupied Buildings Under Construction. 1st ed. Sheet Metal and Air Conditioning Contractors' National Association, Inc., Chantilly, VA.

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Picture 1



Open Cans of Paint on Rolling Scaffold in Second Floor Hallway

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Picture 2



No Containment of Painting on Stairwell